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## TRANSMITTAL FORM

Application Number	10/056,312
Filing Date	January 24, 2002
First Named Inventor	Daryl S. Meredith et al.
Art Unit	3724
Examiner Name	I. Hamilton
Attorney Docket Number	TN-1488

(to be used for all correspondence after initial filing)

Total Number of Pages in This Submission 30

### ENCLOSURES (check all that apply)

<input checked="" type="checkbox"/> Fee Transmittal Form <input type="checkbox"/> Fee Attached <input type="checkbox"/> Amendment / Reply <input type="checkbox"/> After Final <input type="checkbox"/> Affidavits/declaration(s) <input type="checkbox"/> Extension of Time Request <input type="checkbox"/> Express Abandonment Request <input type="checkbox"/> Information Disclosure Statement <input type="checkbox"/> Certified Copy of Priority Document(s) <input type="checkbox"/> Reply to Missing Parts/ Incomplete Application <input type="checkbox"/> Reply to Missing Parts under 37 CFR 1.52 or 1.53	<input type="checkbox"/> Drawing(s) <input type="checkbox"/> Licensing-related Papers <input type="checkbox"/> Petition <input type="checkbox"/> Petition to Convert to a Provisional Application <input type="checkbox"/> Power of Attorney, Revocation Change of Correspondence Address <input type="checkbox"/> Terminal Disclaimer <input type="checkbox"/> Request for Refund <input type="checkbox"/> CD, Number of CD(s) _____ <input type="checkbox"/> Landscape Table on CD	<input type="checkbox"/> After Allowance Communication to TC <input checked="" type="checkbox"/> Appeal Communication to Board of Appeals and Interferences <input type="checkbox"/> Appeal Communication to TC (Appeal Notice, Brief, Reply Brief) <input type="checkbox"/> Proprietary Information <input type="checkbox"/> Status Letter <input checked="" type="checkbox"/> Other Enclosure(s) (please identify below): Return Post Card
<b>Remarks</b>		

### SIGNATURE OF APPLICANT, ATTORNEY, OR AGENT

Firm	Black & Decker Inc.		
Signature			
Printed Name	Adan Ayala, Esq.		
Date	June 23, 2005	Reg. No.	38,373

### CERTIFICATE OF TRANSMISSION/MAILING

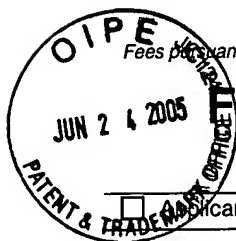
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Signature			
Typed or printed name	Adan Ayala, Esq.	Date	June 23, 2005

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# **FREE TRANSMITTAL** **for FY 2005**

Significant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$ ) 500

## Complete if Known

Application Number	10/056,312
Filing Date	January 24, 2002
First Named Inventor	Daryl S. Meredith et al.
Examiner Name	I. Hamilton
Art Unit	3724
Attorney Docket No.	TN-1488

## METHOD OF PAYMENT (check all that apply)

☐ Check ☐ Credit Card ☐ Money Order ☐ None ☐ Other (please identify) :
☒ Deposit Account Deposit Account Number: 02-2548

Deposit Account Name: Black &amp; Decker (U.S.) Inc.

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

☒ Charge fee(s) indicated below☐ Charge fee(s) indicated below, except for the filing fee☒ Charge any additional fee(s) or underpayments of fee(s)☒ Credit any overpayments

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## FEE CALCULATION

## 1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		Fees Paid (\$)
	Fee (\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	Fee(\$)	Small Entity Fee(\$)	
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

## 2. EXCESS CLAIM FEES

## Fee Description

Each claim over 20 (including Reissues)

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Small Entity Fee (\$)

50 25

200 100

360 180

## Total Claims

## Extra Claims

## Fee(\$)

## Fee Paid (\$)

\_\_\_\_\_ -20 or HP= \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of total claims paid for, if greater than 20.

## Indep. Claims

## Extra Claims

## Fee(\$)

## Fee Paid (\$)

\_\_\_\_\_ - 3 or HP= \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_

HP = highest number of independent claims paid for, if greater than 3.

## Multiple Dependent Claims

## Fee (\$)

## Fee Paid (\$)

## 3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
_____	_____	_____ / 50 = _____ (round up to a whole number) x _____	_____	_____

## 4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): Appeal Brief

## Fees Paid (\$)

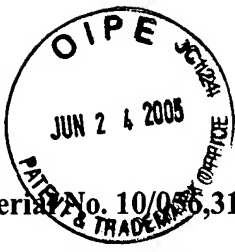
\$500

## SUBMITTED BY

Signature		Registration No. (Attorney/Agent)	38,373	Telephone	410-716-2368
Name (Print/Type)	Adam Ayala, Esq.			Date	June 23, 2005

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Serial No. 10/056,312

UTILITY PATENT

B&D No. TN -1488

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**BOARD OF PATENT APPEALS AND INTERFERENCES**

In re application of: **Daryl S. Meredith et al.**

Serial No.: **10/056,312**

Examiner: **I. Hamilton**

Filed: **January 24, 2002**

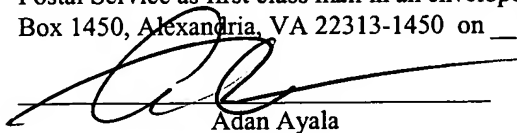
Group Art Unit: **3724**

For: **MITER SAW**

Assistant Commissioner for Patents  
Washington, DC 20231

**APPEAL BRIEF**

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Adan Ayala

Serial No. 10/056,312

UTILITY PATENT

B&D No. TN -1488

TABLE OF CONTENTS

	<u>Page No.</u>
I. INTRODUCTION	1
II. REAL PARTY IN INTEREST	2
III. RELATED APPEALS AND INTERFERENCES	2
IV. STATUS OF CLAIMS	2
V. STATUS OF AMENDMENTS	2
VI. SUMMARY OF CLAIMED SUBJECT MATTER	2
VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL	4
VIII. ARGUMENT	4
<u>Claim 1 is Patentable under 35 USC § 103(a) Over Ushiwata and Tsune.</u>	4
IX. APPENDICES	7
X. CONCLUSION	7



UTILITY PATENT

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Adan Ayala

Dear Sir:

**I. INTRODUCTION**

A final Office Action after Final was mailed on February 15, 2005. In response to such Action, a Notice of Appeal was mailed on May 11, 2005, for the above-identified application. The present appeal brief is being timely filed as required under 37 CFR § 41.37.

06/27/2005 EFLORES 00000016 022548 10056312

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**Serial No. 10/056,312**

**UTILITY PATENT**

**B&D No. TN -1488**

## **II. REAL PARTY IN INTEREST**

The real party in interest in the present case is Black & Decker Inc. An assignment transferring all rights to the present application and resulting patents was filed in the priority application. The assignment can be found at Reel 012524, Frame 0060.

## **III. RELATED APPEALS AND INTERFERENCES**

No other appeals or interferences related to the present case are currently pending.

## **IV. STATUS OF CLAIMS**

Claim 1 is currently pending in the present application. Claims 2-24 have been previously canceled.

Claim 1 is rejected and are presently appealed.

## **V. STATUS OF AMENDMENTS**

No amendments have been filed subsequent to the final office action.

## **VI. SUMMARY OF CLAIMED SUBJECT MATTER**

Pursuant to 37 CFR § 41.37 and MPEP § 1206, Applicant/appellant hereby provides a concise explanation of the inventions defined in the claims involved in the present appeal. This explanation refer to the specification by page and line number and to the drawings, as required by the CFR and the MPEP rules. However, the following explanation only refers to the embodiments

disclosed in the specification and does not discuss alternative mechanisms that would be covered by the claims. Accordingly, the following explanation should not be used to limit the scope of the claims.

Independent Claim 1 calls for a miter saw 1 comprising a base assembly 5 and a rotatable table 6 rotatably connected to the base assembly 5. Spec. p. 7, lns. 5-7. The table 6 has a plane 6P. Spec. p. 7, lns. 11-12.

Miter saw 1 also a saw assembly including a motor M, and a blade 2 disposed on an arbor A. Spec. p. 7, lns. 7-8 and 19-20. The arbor A has a first portion carrying the blade 2, a second portion disposed away from the blade 2, and a first gear G disposed on the second portion. FIG. 13 and spec. p. 7, lns. 19-20.

An intermediate gear G2 meshes with the first gear G. Spec. p. 7, lns. 18-19. A second gear G3 is driven by the motor M and meshes with the intermediate gear G2. Spec. p. 7, ln. 18 and p. 9, lns. 1-2. The intermediate gear G2 is always meshing with the first and second gears G and G3. FIG. 7. The second gear G2 is driven by the motor M via a belt B. Spec. p. 9, lns. 1-2.

Miter saw 1 also has a pivot arm 11 pivotally attached to the table 6 and supporting the saw assembly. Spec. p. 7, lns. 8-9. The pivot arm 11 and saw assembly are pivotable about a horizontal bevel axis from a first position where the blade 2 is substantially perpendicular to the table 6 to a second position where the blade 2 is disposed at an angle relative to the table 6. Spec. p. 19, lns. 9-10. The angle between the blade 2 and the table 6 is about 45 degrees. Id.

The distance between the second portion and at least one of the base assembly 5 and the table 6 is smaller than the distance between the first portion and the at least one of the base assembly 5 and the table 6 when the saw assembly is in the second position. See FIG. 13 and spec. p. 14, lns. 17-18.

## **VII. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

Whether Claim 1 is are unpatentable under 35 USC § 103(a) over US Patent No. 5,425,294 (“Ushiwata”) in view of US Patent No. 5,974,927 (“Tsune”).

## **VIII. ARGUMENT**

### **Claim 1 is Patentable under 35 USC § 103(a) Over Ushiwata and Tsune.**

The Board should reverse the Examiner’s improper final rejection of Claim 1 under 35 USC § 103(a) based on Ushiwata in view of Tsune. In particular, the Examiner erred by failing to show a suggestion or motivation to combine the reference teachings. Therefore, the Examiner’s rejection was improper and should be reversed.

Ushiwata discloses all elements called for in Claim 1 except for the second gear being driven by the motor via a belt. The Examiner relies on Tsune to provide such missing element because “it would have been obvious to provide a belt in Ushiwata as taught by Tsune in order to provide a backlash eliminator assembly, which eliminates backlash between gears.”



This rejection is improper as the Examiner has failed to make a *prima facie* case of obviousness. To establish such case, there must be some suggestion or motivation to one of ordinary skill in the art to combine the reference teachings. MPEP § 2143. In the present case, no such suggestion or motivation exists to combine Ushiwata and Tsune as proposed by the Examiner. This is because neither Ushiwata nor Tsune suggest the desirability of the claimed invention.

An obviousness rejection is improper if there's no motivation to combine, even if the combination of the references taught every element of the claimed invention. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). When called upon to provide such motivation, the Examiner argued that the motivation to provide a belt can be found in Tsune "in order to provide a backlash eliminator assembly, which eliminates backlash between gears." However, Tsune does not teach using a belt to provide a backlash eliminator.

According to Tsune, backlash eliminator 16 temporarily applies braking to the final stage gear 15 upon initiation of the cutting action. Tsune, col. 2, lines 24-28. Such backlash eliminator 16 includes braking gear 17 (which engages final stage gear 15), braking disk 19, brake shaft 18, calipers 21 and hydraulic cylinder 22. Tsune, col. 2, lines 29-41.

In other words, the backlash eliminator 16 does not include a pulley 9 or a belt. Accordingly, the pulley 9 and the belt do not interact with backlash eliminator 16 to provide the backlash eliminating function. Because pulley 9 and belt do not assist in the backlash eliminating function, a person skilled in the art would install not a pulley and/or belt to provide a

**Serial No. 10/056,312**

**UTILITY PATENT**

**B&D No. TN -1488**

backlash eliminating function pursuant to Tsune. Therefore, the motivation to combine the references stated by the Examiner is invalid.

Faced with such facts, the Examiner now alleges that, “although the belt and pulley system are not a part of the backlash eliminator, the belt and pulley are required in the configuration of any apparatus that has the backlash eliminator because of the spatial arrangements and spatial constraints.” In other words, the belt and pulley system are needed in all apparatus that have a backlash eliminator.

US Patent No. 5,8233,081 (attached hereto as Appendix B), which has the same inventor as Tsune, contradicts the Examiner’s allegation, as the circular saw disclosed therein has a backlash eliminator without a belt or pulleys. In other words, “any apparatus that has the backlash eliminator” do not require a belt and pulley, as alleged by the Examiner. Therefore, the alleged motivation to combine the references does not truly exist.

Because no motivation exists to combine Ushiwata and Tsune, no proper *prima facie* case of obviousness can be made. Therefore, Claim 1 is patentable over Ushiwata/Tsune. Accordingly, Applicant/Appellant urges the Board to reverse the Examiner’s improper rejection of the claim under Ushiwata/Tsune and to allow such claim.

**Serial No. 10/056,312**

**UTILITY PATENT**

**B&D No. TN -1488**

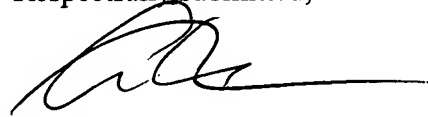
**IX. APPENDICES**

Applicant/Appellant has attached two appendices. In particular, Appendix A contains a copy of the claim involved in the appeal. In addition, Appendix B is a copy of US Patent No. 5,823,081.

**X. CONCLUSION**

Based on the foregoing, Applicant/appellant urges the Board to rule that Claim 1 is patentable over Ushiwata/Tsune.

Respectfully submitted,



Adan Ayala, Reg. No. 38,373  
Attorney for Applicants  
Phone No. (410) 716-2368



## APPENDIX A

1. A miter saw comprising:

a base assembly;

a rotatable table rotatably connected to the base assembly and having a plane;

a saw assembly including a motor, and a blade disposed on an arbor, the arbor having a first portion carrying the blade, a second portion disposed away from the blade, and a first gear disposed on the second portion, an intermediate gear meshing with the first gear, and a second gear driven by the motor and meshing with the intermediate gear, wherein the intermediate gear is always meshing with the first and second gears, the second gear being driven by the motor via a belt; and

a pivot arm pivotally attached to the table and supporting the saw assembly, the pivot arm and saw assembly being pivotable about a horizontal bevel axis from a first position where the blade is substantially perpendicular to the table to a second position where the blade is disposed at an angle relative to the table, the angle between the blade and the table being about 45 degrees;

wherein a distance between the second portion and at least one of the base assembly and the table is smaller than a distance between the first portion and the at least one of the base assembly and the table when the saw assembly is in the second position.